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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/735,292 | 12/12/2003 | Jean Cotteret | LORE:008US | 9950 |

7590

08/05/2005

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| EXAMINER |
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ELHILO, EISA B

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| ART UNIT | PAPER NUMBER |
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1751

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------|-----------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/735,292 | COTTERET ET AL. | |
| | Examiner | Art Unit | |
| | Eisa B. Elhilo | 1751 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 11 and 22-49 is/are rejected.
- 7) ☒ Claim(s) 9 and 12-21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>6/24/2004</u> | 6) <input type="checkbox"/> Other: _____ |

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Claims 1-49 are pending in this application.

DETAILED ACTION

1 The examiner makes of record that instant claims 35 and 36 recite a broad range of components followed by a series of narrow ranges. For examination purposes, the examiner asserts that the narrow ranges recited in the instant claims 35 and 36 are merely exemplary ranges, and thus, the prior art will be applied against the broadest ranges recited in the instant claims 35 and 36. Further, the examiner suggests that applicant should delete the narrow ranges from the instant claims 35 and 36, and add new dependent claims that recite the narrow ranges recited in the instant claims 35 and 36.

Claim Rejections - 35 USC § 103

2 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8, 10-11 and 22-47 rejected under 35 U.S.C. 103(a) as being unpatentable over the Japanese Patent No. (JP 60028912) in view of Lim et al. (US 6,461,391 B1).

The Japanese Patent (JP' 912 A) teaches a hair dyeing composition comprising oxidation bases of phenylenediamines, aminophenols and one or more monosaccharides such as arabinose, xylose and glucose and disaccharides such as maltose, lactose and sucrose, solvent propylene glycol, surfactants and couplers as claimed in claims 1 and 27-34 (see English abstract of the Japanese reference (JP' 912 A1)).

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The instant claims differ from the reference by reciting specific oxidation base of cationic tertiary paraphenylenediamine containing a pyrrolidine ring.

However, the Japanese reference (JP' 912 A1) clearly suggests the use of the genus paraphenylenediamine as amino-based oxidation dyes in the hair dyeing composition (see English abstract).

Lim et al. (US' 391 B1) in analogous art of hair dyeing formulation, teaches a composition comprising oxidation base of cationic tertiary para-phenylenediamine having a formula (1), which is similar to the claimed formula (1), when in the reference formula (1), R, R1 and R2 are alkyl radicals, R4 is hydrogen atom or an alkyl radical and R5 is a hydrogen atom as claimed in claims 1-8 and 10-11 (see col. 2, lines 44-50) and when in the claimed formula (1), R2 represents the onion radical Z of the claimed formula (II), R3 is a hydrogen atom, n is 1 or 0 and R1 is an alkyl radical. The cationic tertiary para-phenylenediamine is represented in the amount of 0.01 to about 5.0%, which is within the claimed range as claimed in claim 35 (see col. 3, lines 43-46). Lim et al. further, teaches the compounds 1-(4-aminophenyl)-N,N-dimethyl-N-pentylpyrrolidin-3-ammonium iodide and 1-(4-aminophenyl)-N-(2-hydroxyethyl)-N,N-dimethylpyrrolidin-3-ammonium iodide which are structurally similar to the claimed compounds as claimed in claims 22-26 (see col. 19, Example 22 (compound 7) and col. 26, Example 29 (compound 14), cationic polymers such as cationic resins as claimed in claim 37 (see col. 8, line 57), thickening polymers as claimed in claim 38 (see col. 8, line 45), surfactants such as anionic surfactants as claimed in claim 39 (see col. 8, line 23), additional oxidation bases such as paraphenylenediamine and couplers such as m-phenylenediamines as claimed in claims 40, 42 and 43 (see col. 5, line 66 and col. 7, line 64), wherein the primary intermediates (oxidation

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bases) and the couplers are used in equivalent amounts in the range of 0.001 to about 10 which within the claimed ranges as claimed in claims 41 and 44 (see col. 7, lines 8-15), wherein the composition further comprises direct dyes as claimed in claim 45 (see col. 7, line 20-54), oxidizing agent of hydrogen peroxide as claimed in claim 47 (see col. 9, line 66). Lim et al. (US' 391 B1) also teaches a similar process for dyeing hair as claimed in claim 48 (see col. 9, lines 60-65).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to formulate such a dyeing composition by incorporating the cationic tertiary para-phenylenediamines as taught by Lim et al. in the composition of (JP' 912) with a reasonable expectation of success. Such a modification would be obvious because the JP' 912 as a primary reference discloses the genus of para-phenylenediamine compounds as oxidation bases. Lim et al. as a secondary reference clearly teaches that the quaternized pyrrolidine compounds are suitable primary intermediates for hair coloring compositions for providing good oxidative coloration of hair such as light fastness, fastness to shampooing, fastness to permanent wave treatment and suitable for providing a wide variety of different color shades with various primary intermediate and coupler compounds (see col. 2, lines 13-20), and, thus, a person of the ordinary skill in the art would be motivated to substitute para-phenylenediamine oxidation bases of the JP' 912. by the cationic tertiary para-phenylenediamines of Lim et al. for providing good oxidation coloring of hair and would expect such a composition to have similar properties to those claimed, absent unexpected results.

With respect to claim 36, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the amounts of the monosaccharides and/or

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disaccharides in the composition in order to get the maximum effective amounts of these ingredients in the composition. Further, as to the optimization of results, a patent will not be granted based upon the optimization of the result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima facie case of obviousness, see *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F. 2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

With respect to claim 49, it would have been obvious to one having ordinary skill in the art at the time the invention was made to formulate such a composition by using a multi compartment device for holding and maintaining the composition because the reference clearly teaches that the oxidation composition is mixed with the oxidizing agent at the time of use (see US' 391, col. 60-64), which implies that both the oxidation composition and the oxidizing agent are provided in separate containers, and, thus, a person of the ordinary skill in the art would be motivated to use a multi-compartment device for holding the dyeing composition, absent unexpected results.

Allowable Subject Matter

3 Claims 9 and 12-21 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record do not teach or disclose the limitations of these claims.

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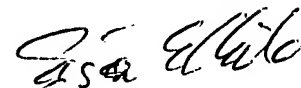
Conclusion

4 The remaining references listed on from 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B. Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -5:30) with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eisa Elhilo
Patent Examiner
Art Unit 1751

August 3, 2005